

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on September 10, 2002, and the references cited therewith.

Claims 30, 32, 39, 40 and 51 are amended, no claims are canceled or added; as a result, claims 30-51 remain pending in this application.

§103 Rejection of the Claims

Claims 30-31, 40, 41, 43 and 51 were rejected under 35 USC § 103(a) as being unpatentable over Joyce (US 4,686,329) in view of Kirsch (US 4,390,347). Applicant notes that Kirsch is not an inventor on US 4,390,347. Based on statements in the Office Action and for the purposes of this response, Applicant assumes that the Office Action intended to refer to US 4,546,347.

In order for a *prima facie* case of obviousness to exist, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *M.P.E.P.* §§ 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)). Applicant respectfully traverses the rejection, because the cited references do not teach each and every element of Applicant's claims, and because no proper motivation to combine the references has been provided. As a result, a *prima facie* case of obviousness does not exist.

Each of claims 30-31, 40, 41, 43 and 51 include, either directly or by inheritance, the recitation of a gradient that substantially covers a surface. The Office Action correctly states that Joyce does not teach a gradient. However, the Office Action, in responding to Applicant's arguments in the previously filed response of July 1, 2002, states that Kirsch teaches a gradient. Applicant reasserts the argument made in the previous response that Kirsch does not in fact teach

a gradient. The Office Action states that the idea of a gradient is inherent in Kirsch, because Kirsch discloses a grid with contrasting line intersections. Applicant respectfully disagrees because the Office Action has not established a *prima facie* case of inherency because, as recited in MPEP § 2112, “In relying upon the theory of inherency, the examiner must provide basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art,” citing *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

The Office Action only argued that Kirsch teaches a grid with contrasting line intersections and that the rate of changes provides the gradient. A rate of change is not disclosed in Kirsch, rather Kirsch detects an on/off state based on the change in contrast. Thus, the Office Action does not even assert that the allegedly inherent characteristic is necessary, let alone provide a basis in fact and/or technical reasoning. Applicant respectfully submits that a gradient substantially covering a surface does not necessarily flow from Kirsch because the contrasting lines do not necessarily form a gradient.

To serve as an anticipation when a reference is silent about the asserted inherent characteristic, the gap in the reference may be filled with recourse to extrinsic evidence. But, such evidence must make clear that “the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.” *Continental Can Co. v. Monsanto Co.*, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). Applicant respectfully submits that the Examiner has not produced extrinsic evidence to show that a gradient as recited in the claims is necessarily present in Kirsch.

Furthermore, Kirsch does not teach a gradient that substantially covers the surface. In Kirsch, the contrast levels form individual blocks on the surface, they do not substantially cover the surface. For the above reasons, neither Joyce nor Kirsch teach each and every element of Applicant’s claims. Applicant respectfully requests the withdrawal of the rejection of claims 30-31, 40, 41, 43 and 51.

Claims 32-33, 36-37 and 39 were rejected under 35 USC § 103(a) as being unpatentable over Pettypiece (US 5,223,709) in view of Mak (US 5,420,943). Applicant respectfully traverses the rejection, because the claims contain elements not found in either reference. As an example,

claims 32-33 and claims 36-37 each include either directly or through inheritance from a base claim the recitation of a first gradient having a first color and a second gradient having a second color. Pettypiece states that a grayscale range of white to black is used to detect a joystick position. Nowhere does Pettypiece teach or disclose a first gradient having a first color and a second gradient having a second color.

Furthermore, Mak does not teach or suggest the recited language. Mak discloses a grid of horizontal and diagonal lines that may vary in width or thickness (see column 4, lines 21-38). Mak does not teach that the lines vary in intensity. The Office Action implies that claim 7 teaches lines varying in intensity. Claim 7, consistent with column 4, recites lines having a first and second thickness. Nowhere does Mak mention anything about line intensity, let alone color intensity. As a result, neither Pettypiece nor Mak, alone or in combination, teach uniquely identifying a position using a first gradient in a first color and a second gradient in a second color. Therefore the Examiner is respectfully requested to withdraw the rejection of claims 32-33 and 36-37.

Additionally, no proper motivation to combine the references has been provided in the Office Action. The Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. *In re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002, emphasis added). The Office Action stated that the combination “would provide Pettypiece’s system with the enhanced capability of providing a universal input device for the computer with a great deal of freedom”. The statement is a mere conclusory statement of subjective belief. Furthermore, no reasoning has been supplied to explain the conclusion. Applicant respectfully submits that the Office Action has not provided objective evidence for a suggestion or motivation to combine the references.

Claims 34-35 were rejected under 35 USC § 103(a) as being unpatentable over Pettypiece. Claim 34, and claim 35 by inheritance from claim 34, recites a first gradient in a first color and a second gradient in a second color. As discussed above, Pettypiece merely discloses a single gray scale range, Pettypiece does not disclose two gradients of differing colors. As a result, Pettypiece does not teach or disclose each and every element of Applicant’s claims 34 and

35. Applicant respectfully requests the withdrawal of the rejection of claims 34 and 35.

Furthermore, claim 34 was rejected with a statement that the use of a convex dome is a "design choice." Applicant again respectfully submits that there is no support for the statement and no reference was cited to support the statement as requested in Applicant's response filed July 1, 2002. Applicant notes that the Examiner is taking Official Notice elements in claim 34 which are not found in the combination cited. Applicant respectfully traverses this Official Notice and requests the Examiner to either 1.) cite references in support of this position pursuant to M.P.E.P. §§ 2144.03, or 2.) submit an affidavit as required by 37 C.F.R. §§ 1.104(d)(2) to support the Examiner's position.

Claim 38 was rejected under 35 USC § 103(a) as being unpatentable over Mak in view of Pettypiece. Claim 38 recites in part "a gradient having a plurality of positions uniquely varying in intensity level of a first color on a first axis and uniquely varying in intensity level of a second color on a second axis." As discussed above, neither Mak nor Pettypiece teach or disclose the use of a first color and a second color to establish two gradients. As a result, the combination of Mak and Pettypiece fails to teach or disclose each and every element of Applicant's claims. Applicant respectfully requests the withdrawal of the rejection of claim 38.

Additionally, no proper motivation to combine Mak and Pettypiece has been provided in the Office Action. The Office Action stated that the combination "would provide Mak's system with the enhanced capability of creating a better ergonomic way to control a pointing device on a display screen". The statement is a mere conclusory statement of subjective belief. Furthermore, no reasoning has been supplied to explain the conclusion. Applicant respectfully submits that the Office Action has not provided objective evidence for a suggestion or motivation to combine the references.

Claims 42 and 44-49 were rejected under 35 USC § 103(a) as being unpatentable over Kirsch (US 4,390,873 referred to as K-873) in view of Kirsch (US 4,546,347 referred to as K-347). Applicant respectfully traverses the rejection because the cited references do not teach each and every element of Applicant's claims. Each of claims 42 and 44-49 depend from claim 40, which recites a first and second gradient that each substantially cover the surface. As discussed above, K-347 does not teach or suggest a gradient, nor does it teach a gradient that

substantially covers a surface. In addition, Applicant has reviewed K-873 and can find no teaching or suggestion of a gradient, nor a gradient that substantially covers the surface. As a result, neither K-873 nor K-347 teach or disclose each and every element of Applicant's claims. The Examiner is respectfully requested to withdraw the rejection of claims 42 and 44-49.

Furthermore with respect to claims 46-48, the Office Action states that K-347 disclose a first and second color. As noted above, Kirsch does not disclose a gradient. It merely discloses that lines of the individual cells on the surface may be of a first and second color. It does not disclose that the lines form a gradient of a first and second color. Applicant respectfully requests the withdrawal of the rejection of claims 46-48.

Claim 50 was rejected under 35 USC § 103(a) as being unpatentable over Kirsch (US 4,390,873) in view of Pettypiece. This rejection is respectfully traversed, because the cited references do not teach or disclose each and every element of Applicant's claims. Like claims 42 and 44-49, claim 50 depends from claim 40. Applicant respectfully submits that claim 50 is allowable for the same reasons as discussed above with respect to claims 42 and 44-49.

Withdrawal of the rejection of claim 50 is respectfully requested.

AMENDMENT AND RESPONSE UNDER 37 C.F.R. 1.111

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Serial No.: 09/491,110

Docket: 450.129US2

Filed: January 25, 2000

Title: POINTING DEVICE WITH ABSOLUTE AND RELATIVE POSITIONING CAPABILITY

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612-373-6954) to facilitate prosecution of this application.

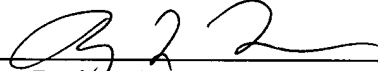
If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-0439.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on this 10th day of February, 2002.

Name Rodney L. Lacy Signature 